# DEPARTMENT OF ENVIRONMENTAL CONSERVATION AIR QUALITY OPERATING PERMIT

Permit No. 194TVP01	Issue Date: April 5, 2000
Application No. A00194 Administrative Revision: 11/27/00	Expiration Date: April 5, 2005
Administrative Revision: 11/27/00	
The Department of Environmental Conservation, using an operating permit to the Permittee, <b>Airline Support, Inc., Incineration Facility</b> .	
This permit satisfies the obligation of the owner are in AS 46.14.130(b).	nd operator to obtain an operating permit as set out
As required by AS 46.14.120(c), the Permittee sha operating permit.	ll comply with the terms and conditions of this
As set out in 18 AAC 50.340(i), after the issue dat required to comply with the terms and conditions on No. 9021-AA011.	-
John F. Kuterbach, Manager Da	
Air Permits Program	

Permit No. 194TVP01 Page 2 of 26

# **Table of Contents**

Section 1.	Identification	4
Section 2.	General Emission Information	5
Section 3.	Fee Requirements	6
Section 4.	Table 1 Source Inventory and Description	7
Section 5.	Source-Specific Requirements	8
Section 6.	Insignificant Sources	. 12
Section 7.	Generally Applicable Requirements	. 13
Section 8.	General Source Testing and Monitoring Requirements	. 16
Section 9.	General Recordkeeping, Reporting, and Compliance Certification Requirements	. 19
Section 10.	Standard Conditions Not Otherwise Included in the Permit	. 21
Section 11.	Visible Emission Evaluation Procedures	. 23
Visible E	missions Field Data Sheet	. 24
Visible E	missions Observation Record	. 25
Section 12	ADEC Notification Form	26

Permit No. 194TVP01 Page 3 of 26

#### List of Abbreviations Used in this Permit

AAC..... Alaska Administrative Code ADEC ...... Alaska Department of Environmental Conservation AS..... Alaska Statutes ASTM ...... American Society for Testing and Materials CFR ...... Code of Federal Regulations COMS ...... Continuous Opacity Monitoring System dscf...... Dry standard cubic feet EPA..... US Environmental Protection Agency gr/dscf......Grain per dry standard cubic feet (1 pound = 7000 grains) HAPS...... Hazardous Air Pollutants [hazardous air contaminants as defined in AS 46.14.990(14)] ID...... Source Identification Number MACT...... Maximum Achievable Control Technology Mlb ..... thousand pounds RM...... Reference Method PPM..... Parts per million PS ..... Performance specification PSD..... Prevention of Significant Deterioration SIC.....Standard Industrial Classification SO<sub>2</sub>......Sulfur dioxide TPH..... Tons per hour VOC ......volatile organic compound [as defined in 18 AAC 50.990(103)]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 4 of 26

#### Section 1. Identification

Names and Addresses

Permittee: Airline Support, Inc.

P.O. Box 190735

Anchorage, AK 99519-0735

(907) 272-2211

Facility: Airline Support, Inc., Incineration Facility

Physical Address: 3551 Postmark Drive

Anchorage, AK 99502

(907) 272-2211

Owner: Airline Support, Inc.

> 4450 West 50th Street Anchorage, AK 99502

Operator: Same as owner

Permittee's Responsible Official Donald Tulin, President

Donald J. Tulin Designated Agent:

P.O. Box 190735

Anchorage, AK 99519-0735

(907) 272-2211

Mark Flaker, Donald J. Tulin Facility and Building Contact:

P.O. Box 190735

Anchorage, AK 99519-0735

(907) 272-2211

Fee Contact: Donald J. Tulin

P.O. Box 190735

Anchorage, AK 99519-0735

(907) 272-2211

SIC Code of the Facility:

4700

[18 AAC 50.350(b), 1/18/97]

#### Section 2. General Emission Information

Emissions of Regulated Air Contaminants, as provided in Permittee's application:

PM-10, Particulate Matter, Sulfur Oxides, Nitrogen Oxides, Carbon Monoxide, VOC, Arsenic, Cadmium, Chromium, Hydrogen Chloride, Lead, Dioxins and Furans, and smaller amounts of other regulated contaminants.

# **Operating Permit Classifications:**

1. 18 AAC 50.325(c)

Facility Classifications as described under 18 AAC 50.300(b)-(f):

2. Ambient Air Quality Facility – 18 AAC 50.300(b)(3) – a facility containing incinerators with a combined rated capacity of 1000 pounds per hour or more.

[18 AAC 50.350(b), 1/18/97]

Permit No. 194TVP01 Page 6 of 26

# Section 3. Fee Requirements

**1. General.** The Permittee shall pay permit administration fees in accordance with AS 46.14.240-250 and 18 ACC 50.400-420.

[18 AAC 50.400 - 420 & 18 AAC 50.350(c), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 7 of 26

# Section 4. Table 1. - Source Inventory and Description

ID	Source Name	Source Description
1	Consumat Incinerator	Model C-225P 13.2 ton per day incinerator

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 8 of 26

#### Section 5. Source-Specific Requirements

The conditions in this section apply to Source ID 1, the Consumat incinerator.

#### 2. **Visible Emission Limits**

The Permittee shall not cause or allow visibility through the exhaust effluent of the incinerator to be reduced by visible emissions, excluding water vapor, by more than 20 percent for a total of more than three minutes in any one hour.

[18 AAC 50.050(a)(2), 1/18/97]

#### 2.1 Monitoring

a. Once each operating day, within 10 minutes of initial charging of food catering waste, and once each month immediately after cardboard is charged to preheat the primary chamber, observe the exhaust gas of the source for the presence or absence of smoke. Water vapor is not considered smoke.

Record the following information for each observation:

- The date and time of the observation: (i)
- (ii) The type of waste being burned by the incinerator during the observation;
- (iii) Whether smoke is present or absent in the exhaust gas;
- (iv) Name of the person making the observation; and
- (v) Signature of the person making the observation
- b. If smoke is observed during an observation under condition 2.1a, immediately begin to observe and record visible emissions in the exhaust gas using the procedures contained in Section 11 of this permit. Continue the observation for 15 consecutive minutes. If three or more 15-second opacity readings during this 15 minute period are greater than 20% opacity, continue the observation for an additional 45 consecutive minutes.
- The Permittee may reduce the frequency of observations under condition 2.1a to one c. observation every 8 operating days provided that smoke is absent in the exhaust during the most recent 10 consecutive observations. If a smoke is observed in the exhaust anytime after the frequency is reduced in accordance with this paragraph, the Permittee must resume the frequency of observations set forth in condition 2.1.

[18 AAC 50.350(g), (h), 1/18/97]

2.2 Report in accordance with condition 30 when 13 or more 15-second opacity observations exceed 20%. Summarize these opacity violations in the semi-annual facility operation report of condition 31.

[18 AAC 50.350(i), 1/18//97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 9 of 26

#### **3. Particulate Matter Emissions**

The Permittee shall not cause or allow particulate matter (PM) emissions from the incinerator to exceed 0.15 grains per cubic foot of exhaust gas corrected to 12 percent CO<sub>2</sub> and standard, conditions averaged over three hours.

[18 AAC 50.050(b), 1/18/97]

#### 3.1 Monitoring

- Conduct a particulate matter source test on incinerator stack emissions no later than June 30, 2003.
  - (i) Conform to the requirements in Section 8 when performing the source test. Conduct at least one source test run to include the period of initial charging of food catering waste into the incinerator and at least the following 45 minutes.

Conduct additional source testing conforming to this condition if the incinerator burns any waste other than food catering waste. This does not apply to cardboard that may be used to bring the lower chamber temperature to 950° F during the preheat phase.

[18 AAC 50.350(g), (h), 1/18/97]

(ii) Monitor CO<sub>2</sub> levels continuously during the source test. Compute the PM concentration corrected to 12% CO<sub>2</sub> for each source test run using the following equation:

$$c_{12} = c_s \times (12 / \%CO_2)$$

Where:

**C<sub>12</sub>** is the particulate matter concentration in gr/dscf, corrected to 12% CO<sub>2</sub>;

**c**<sub>s</sub> is the particulate matter concentration in gr/dscf measured during a one hour source test run using 40 C.F.R. 60, Appendix A, Method 5; and

**%CO<sub>2</sub>** is the percent CO<sub>2</sub> concentration on a dry basis measured during the one hour source test run.

[18 AAC 50.350(g), 1/18/97]

Observe and record visible emissions during each test run in accordance with (iii) Section 11.

[18 AAC 50.350(g), 1/18/97]

(iv) Monitor and record the primary and secondary chamber temperatures at least once every 10 minutes during the source test.

[18 AAC 50.350(g), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000 Permit No. 194TVP01 Page 10 of 26

> (v) Conduct the source tests as closely as practicable to the maximum anticipated operating rate of the incinerator. Processing rates for subsequent operation is limited to the highest operating rate at which compliance with the particulate matter and opacity standards is demonstrated.

> > [18 AAC 50.350(g), 1/18/97]

b. Measure and record the primary and secondary chamber temperatures each operating day at the end of the preheat phase before charging food catering waste into the incinerator.

[18 AAC 50.350(g), 1/18/97]

#### 3.2 Reporting

Report the source test results in accordance with condition 24. In the source test report, include the primary and secondary chamber temperatures recorded during the test runs and the visible emissions data. If the test indicates PM concentrations in excess of the particulate matter standard of condition 3, submit a report in accordance with condition 30.

[18 AAC 50.350(i). 1/18/97]

#### 4. **Incinerator Operation**

Based on the February 1999 source test conditions, the Permittee shall operate the primary and secondary chambers of the incinerator within the following temperature ranges:

 $950 - 1600^{\circ} F$ Primary Chamber

Secondary Chamber 1600 – 1850° F

At startup, the Permittee shall preheat the primary chamber of the incinerator to at least 950° F before introducing the food catering waste into the primary chamber. The Permittee may use cardboard during the preheating phase to bring the primary chamber temperature to 950° F.

If additional source testing demonstrates compliance with the particulate matter and opacity standards outside these ranges, the Department may approve in writing new allowable temperature ranges.

If, after food catering wastes have been charged into the incinerator, primary or secondary temperatures occur outside the required ranges, except during burndown, the Permittee shall take immediate corrective action to restore operation within the required ranges.

[18 AAC 50.350(g)(5), 1/18/97]

#### 4.1 Record Keeping

Record the following information each operating day:

- a. The calendar date;
- b. The time when the incinerated operated;

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 11 of 26

- c. The start time and the end time of the preheat period;
- d. The primary and secondary chamber temperatures at the end of the preheat period;
- e. The start and end time when the incinerator operates outside the primary and secondary temperature ranges; and
- f. The time and a description of corrective actions taken to bring incinerator temperatures within the required ranges, and effectiveness of the corrective actions.

[18 AAC 50.350(h), 1/18/97]

# 4.2 Reporting

Report temperature deviations from the requirements of condition 4 in accordance with condition 30, and in the operating reports of condition 31.

[18 AAC 50.350(i), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 12 of 26

#### Section 6. Insignificant Sources

This section contains the requirements that the Permittee identified under 18 AAC 50.335(q)(2) as applicable to insignificant sources at the facility. This section also specifies the testing, monitoring, reporting, and record keeping for insignificant sources that the Department finds necessary to ensure compliance with the applicable requirements. Insignificant sources are not exempted from any air quality control requirement or federally-enforceable requirement, except that the requirements of conditions 30 and 31 of this permit do not apply to this section.

As set out in 18 AAC 50.350(m), the shield of AS 46.14.290 does not apply to insignificant sources.

5. The Permittee shall not cause or allow visible emissions, excluding condensed water vapor, emitted from an industrial process, fuel-burning equipment, or an incinerator to reduce visibility through the exhaust effluent by greater than 20% for more than three minutes in any one hour.

[18 AAC 50.055(a)(1) and 18 AAC 50.050(a)(2), 1/18/97]

6. The Permittee shall not cause or allow particulate matter emitted from an industrial process or fuel-burning equipment to exceed 0.05 grains per cubic foot of exhaust gas corrected to standard conditions and averaged over three hours.

[18 AAC 50.055(b)(1), 1/18/97]

7. The Permittee shall not cause or allow sulfur compound emissions, expressed as SO<sub>2</sub>, from an industrial process or fuel-burning equipment, to exceed 500 PPM averaged over three hours.

[18 AAC 50.055(c), 1/18/97]

8. Based on reasonable inquiry, the Permittee shall certify compliance with the requirements specified in conditions 5, 6, and 7 as set out in condition 32 of this permit.

[18 AAC 50.350(m)(3), 9/4/98]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 13 of 26

# Section 7. Generally Applicable Requirements

**9. Asbestos NESHAP.** The Permittee shall comply with the requirements set forth in 40 CFR §61.145, §61.150, and §61.152, and the applicable sections set forth in 40 CFR §61, Subpart A and Appendix A.

[18 AAC 50.040(b)(3) & 18 AAC 50.350(d)(1), 1/18/97] [Federal Citation: 40 CFR §61, Subpart M, 12/19/96]

**10. Refrigerant Recycling and Disposal.** The Permittee shall comply with the standards for recycling and emission reduction of refrigerants set forth in 40 CFR §82, Subpart F.

[18 AAC 50.040(d) & 18 AAC 50.350(d)(1), 1/18/97] [Federal Citation: 40 CFR §82, Subpart F, 7/1/97]

- 11. Good Air Pollution Control Practice. The Permittee shall install, maintain, and operate, in accordance with the manufacturer's procedures, fuel burning equipment, process equipment, emission control devices, testing equipment and monitoring equipment to provide optimum control of air contaminant emissions during all operating periods. This condition is not federally-enforceable.
  - 11.1 Within one month of the effective date of this permit, submit an operation and maintenance plan to the Department which provides training for each facility operator. Annual refresher training shall be included as a part of the operating and maintenance plan.
  - 11.2 Train each incinerator operator to follow the operating and maintenance plan by December 31, 2000. New operators shall be fully trained within thirty days of hiring.
  - 11.3 Keep records of operator training.

[18 AAC 50.030, 18 AAC 50.350(f)(2) - (3), & 18 AAC 50.350(g) - (h), 1/18/97]

**12. Dilution.** The Permittee shall not dilute emissions with air to comply with this permit.

[18 AAC 50.045(a) 1/18/97]

- 12.1 Check all ductwork and exhaust systems for leaks, and repair any leaks found
  - a. immediately before conducting a source test to demonstrate compliance with this permit; and
  - b. once every twelve months for exhaust measured by a continuous emissions monitor.

[18 AAC 50.350(g), 1/18/97]

12.2 Keep records of all inspections and repairs performed under this condition.

[18 AAC 50.350(h), 1/18/97]

12.3 Upon request of the Department, submit copies of the records.

[18 AAC 50.350(i), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 14 of 26

13. The Permittee shall not construct, operate, or modify a source that will result in a violation of the applicable emission standards or that will interfere with the attainment or maintenance of the ambient air quality standards or maximum allowable ambient concentrations.

[18 AAC 50.045(c), 1/18/97]

13.1 Obtain all permits or permit revisions required for construction, modification, or operation under 18 AAC 50 and AS 46.14.

[18 AAC 50.350(h), 1/18/97]

13.2 Comply with the conditions of all permits obtained under 18 AAC 50 and AS 46.14.

[18 AAC 50.350(i), 1/18/97]

**14. Bulk Materials Handling, Construction, and Industrial Activities.** The Permittee shall take reasonable precautions to prevent particulate matter from being emitted into the ambient air as a result of industrial activities, construction projects, or the handling, transportation, and storage of bulk materials.

[18 AAC 50.040(e), 18 AAC 50.045(d), & 18 AAC 50.350(d)(1), 1/18/97]

- 14.1 Keep records describing all precautions taken to prevent particulate matter from becoming airborne due to any of the activities described in this condition. If the precautions taken by the Permittee are not listed in the State Air Quality Control Plan, also record a statement describing why the Permittee finds the precaution reasonable. Reasonable precautions, as listed in the State Air Quality Control Plan, include
  - a. installation and use of hoods, fans, and dust collectors to enclose and vent the handling of dusty materials;
  - b. use of water or chemicals for dust control in the demolition of existing structures, construction operations, road grading, or land clearing; and
  - c. application of asphalt, oil, water, or suitable chemicals on dirt roads, material stockpiles, and other surfaces which can create airborne dusts.

[18 AAC 50.040(e) & 18 AAC 50.350(g - h), 1/198/97]

- 14.2 At least once each month, perform visual surveys of fugitive particulate matter sources as follows:
  - a. Conduct surveys of all sources in accordance with the procedures listed in 40 CFR §60, Appendix A, RM 22.
  - b. Within 2 days of discovering that particulate matter emissions are leaving the property, initiate corrective actions to prevent emissions from leaving the property.
  - c. Keep contemporaneous records of all visual surveys performed and corrective actions taken to prevent particulate matter emissions from leaving the property. Submit summaries of the records with the report required by condition 31 of this permit.

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 15 of 26

> Submit a report in accordance with condition 30 whenever a visual survey reveals that d. particulate matter emissions are leaving the property.

> > [18 AAC 50.350(q - i), 1/18/97]

**Stack Injection.** The Permittee shall not release materials other than process emissions, products **15.** of combustion, or materials introduced to control pollutant emissions from a stack at a source constructed or modified after November 1, 1982, unless approved in writing by the Department.

[18 AAC 50.055(a) and 18 AAC 50.310(m), 1/18/97]

**Air Pollution Prohibited.** The Permittee shall not cause any emission which is injurious to human health or welfare, animal or plant life, or property, or which would unreasonably interfere with the enjoyment of life or property.

[18 AAC 50.110, 5/26/72; 18 AAC 50.040(e), & 18 AAC 50.350(d)(1), 1/18/97]

16.1 Within 24 hours of receiving a complaint that is attributable to emissions from the facility, investigate the complaint and initiate corrective actions to alleviate or eliminate the cause of the complaint.

[18 AAC 50.350(g), 1/18/97]

16.2 Keep records of the date, time, and nature of all complaints received and summary of the investigation and corrective actions undertaken for complaints attributable to emissions from the facility. Upon request of the Department, submit copies of the records.

[18 AAC 50.350(h - i), 1/18/97]

**Permit Renewal:** To renew this permit, the Permittee shall submit a complete application under 18 AAC 50.335 no sooner than October 5, 2003, and no later than October 5, 2004.

[18 AAC 50.335(a), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 16 of 26

# Section 8. General Source Testing and Monitoring Requirements

**18. Requested Source Tests.** In addition to any source testing explicitly required by this permit, the Permittee shall conduct source testing as requested by the Department to determine compliance with applicable permit requirements.

[18 AAC 50.220(a), 18 AAC 50.345(a)(10), 1/18/97]

- **19. Operating Conditions.** Unless otherwise specified by an applicable requirement or test method, the Permittee shall conduct source testing
  - 19.1 At a point or points that characterize the actual discharge to into the ambient air; and
  - 19.2 At the maximum rated burning or operating capacity of the source or another rate determined by the Department to characterize the actual discharge into the ambient air.

[18 AAC 50.220(b) & 18 AAC 50.350(g), 1/18/97]

- **20. Reference Test Methods.** The Permittee shall use the following as reference test methods when conducting source testing for compliance with this permit:
  - 20.1 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(a) must be conducted in accordance with the methods and procedures specified in 40 CFR §60.

[18 AAC 50.220(c) & 18 AAC 50.350(g), 1/18/97]

20.2 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(b) must be conducted in accordance with the methods and procedures specified in 40 CFR §61.

[18 AAC 50.220(c) & 18 AAC 50.350(g), 1/18/97]

20.3 Source testing for compliance with requirements adopted by reference in 18 AAC 50.040(c) must be conducted in accordance with the source test methods and procedures specified in 40 CFR §63.

[18 AAC 50.220(c) & 18 AAC 50.350(g), 1/18/97]

20.4 Source testing for the reduction in visibility through the exhaust effluent must be conducted in accordance with the procedures set out in Section 11 of this permit.

[18 AAC 50.220(c) & 18 AAC 50.350(g), 1/18/97

20.5 Source testing for emissions of particulate matter, sulfur compounds, nitrogen compounds, carbon monoxide, lead, volatile organic compounds, fluorides, sulfuric acid mist, municipal waste combustor organics, metals, and acid gases must be conducted in accordance with the methods and procedures specified 40 CFR §60, Appendix A.

[18 AAC 50.220(c), 18 AAC 50.040 & 18 AAC 50.350(g), 1/18/97]

20.6 Source testing for emissions of PM-10 must be conducted in accordance with the procedures specified in 40 CFR §51, Appendix M.

[18 AAC 50.220(c) & 18 AAC 50.350(g), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 17 of 26

20.7 Source testing for emissions of any contaminant may be determined using an alternative method approved by the Department in accordance with Method 301 in Appendix A to 40 CFR §63.

[18 AAC 50.220(c) & 18 AAC 50.350(g), 1/18/97]

21. Excess Air Requirements. To determine compliance with this permit, standard exhaust gas volumes must only include the volume of gases formed from the theoretical combustion of fuel, plus the excess air volume normal for the specific source type, corrected to standard conditions (dry gas at 70° F and an absolute pressure of 760 millimeters of mercury).

[18 AAC 50.990(88), 18 AAC 50.220(c)(3) & 18 AAC 50.350(g), 1/18/97]

**22. Test Plans.** Before conducting any source tests, the Permittee shall submit a plan to the Department. The plan must include the methods and procedures to be used for sampling, testing, and quality assurance, and must specify how the source will operate during the test and how the Permittee will document this operation. A complete plan must be submitted within 60 days of receiving a request under condition 18 and at least 30 days before the scheduled date of any tests.

[18 AAC 50.345(a)(10), 18 AAC 50.350(b)(3) & 18 AAC 50.350(g), 1/18/97]

**23. Test Notification.** At least 10 days before conducting a source test, the Permittee shall give the Department written notice of the date and time the source test will begin.

[18 AAC 50.345(a)(10), 18 AAC 50.350(b)(3) & 18 AAC 50.335(g), 1/18/97]

**24. Test Reports.** Within 45 days after completing a source test, the Permittee shall submit two copies of the results, to the extent practical, in the format set out in the *Source Test Report Outline* of Volume III, Section IV.3, of the State Air Quality Control Plan, adopted by reference in 18 AAC 50.030(8). The Permittee shall certify the results as set out in condition 26 of this permit.

[18 AAC 50.345(a)(10), 18 AAC 50.350(b)(3) & 18 AAC 50.350(h), 1/18/97]

25. Particulate Matter Calculations. In source testing for compliance with the particulate matter standards in condition 3.1, the three-hour average is determined using the average of three one-hour test runs. The source testing must account for those emissions caused by soot blowing, grate cleaning, or other routine maintenance activities by ensuring that at least one test run includes the emissions causes by the routine maintenance activity and is conducted under conditions that lead to representative emissions from the activity. The emissions must be quantified using the following equation:

$$E = E_{M} \left[ (A + B) \times \frac{S}{R \times A} \right] + E_{NM} \left[ \frac{(R - S)}{R} - \frac{B \times S}{R \times A} \right]$$

Where:

E= the total particulate matter emissions of the source in grains per dry standard cubic foot (gr/dscf).

 $E_{M}$ = the particulate matter emissions in gr/dscf measured during the test that included the routine maintenance activity.

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 18 of 26

 $E_{NM}$ = the arithmetic average of particulate emissions in gr/dscf measured during by the test runs that did not include the maintenance activity.

- A= the period of routine maintenance activity occurring during the test run that included routine maintenance activity, expressed to the nearest hundredth of an hour.
- B= the total period of the test run, less A.
- R= the maximum period of source operation per 24 hours, expressed to the nearest hundredth of an hour.
- S= the maximum period of routine maintenance activity per 24 hours, expressed to the nearest hundredth of an hour.

[18 AAC 50.220(f) & 18 AAC 50.350(g), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 19 of 26

# Section 9. General Recordkeeping, Reporting, and Compliance Certification Requirements

**26. Certification.** The Permittee shall certify all reports, compliance certifications, or other documents submitted to the Department under this permit in accordance with the requirements set forth in 18 AAC 50.205. For the same six-month reporting period, the reports submitted pursuant to condition 30 may be certified with the operating report required by condition 31 of this permit. All other reports must be certified upon submittal.

[18 AAC 50.205, 18 AAC 50.345(a)(9), 18 AAC 50.350(b)(3) & 18 AAC 50.350(i) 1/18/97]

**27. Submittals.** Unless otherwise directed by the Department or this permit, the Permittee shall send reports, compliance certifications, and other documents required by this permit to ADEC, Air Permits Program, 610 University Avenue, Fairbanks, AK 99709-3643, ATTN: Compliance Technician.

[18 AAC 50.350(i), 1/18/97]

**28. Information Requests.** The Permittee shall furnish to the Department, within a reasonable time, any information the Department requests in writing to determine whether cause exists to modify, revoke and reissue, or terminate the permit, or to determine compliance with the permit. Upon request, the Permittee shall furnish to the Department copies of records required to be kept by this permit. The Department, in its discretion, will require the Permittee to furnish copies of those records directly to the federal administrator.

[18 AAC 50.200, 18 AAC 50.345(a)(8), 18 AAC 50.350(b)(3) & 18 AAC 50.350(g - i), 1/18/97]

- **29. Recordkeeping Requirements.** The Permittee shall keep all records required by this permit for at least five years after the date of collection, including
  - 29.1 Copies of all reports and certifications submitted pursuant to this Section of this permit.
  - 29.2 Records of all monitoring required by this permit, and information about the monitoring including
    - a. calibration and maintenance records, original strip chart or computer-based recordings for continuous monitoring instrumentation;
    - b. sampling dates and times of sampling and measurements;
    - c. the operating conditions that existed at the time of sampling or measurement;
    - d. the dates analyses were performed;
    - e. the location where samples were taken;
    - f. the company or entity that performed the sampling and analyses;
    - g. the analytical techniques or methods used in the analyses; and

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 20 of 26

h. the results of the analyses.

[18 AAC 50.350(h), 1/18/97]

**30.** Excess Emission Reports. The Permittee shall report all emissions or operations that exceed or deviate from the requirements of this permit or that present a potential threat to human health or safety as soon as possible, but no later than 48 hours, after the event commences. The report must include the information listed on the form contained in Section 12 of this permit. The Permittee may use this form to report emissions under this condition.

[18 AAC 50.235(a)(2), 18 AAC 50.240(c) & 18 AAC 50.350(i), 1/18/97]

- **31. Operating Reports.** During the life of this permit, the Permittee shall submit an original and two copies of an operating report by August 1 for the period January 1 to June 30, and by February 1 for the period July 1 to December 31. The initial report does not need to address operation before the issue date of the permit. This report must include copies of the records required to be reported by the conditions of this permit. In addition, the report must include a listing of all deviations from the requirements of this permit that occurred during the reporting period. For each deviation, the report must identify
  - a. the date of the deviation;
  - b. the equipment involved;
  - c. the permit condition;
  - d. a description of the deviation; and
  - e. any corrective action or preventive measures taken and the date of such actions.

[18 AAC 50.350(d)(4), (f)(3) & (i), 1/18/97]

- **32. Annual Compliance Certification.** Each year by February 1, the Permittee shall compile and submit an original and two copies of an annual compliance certification report as follows:
  - 32.1 For each permit term and condition set forth in Section 3 through Section 9 of this permit, including terms and conditions for monitoring, reporting, and recordkeeping:
    - a. certify the compliance status over the preceding calendar year consistent with the monitoring required by this permit;
    - b. state whether compliance is intermittent or continuous; and
    - c. briefly describe each method used to determine the compliance status.
  - 32.2 Submit a copy of the report directly to the U.S. EPA Region 10, Office of Air Quality, M/S OAQ-107, 1200 Sixth Avenue, Seattle, WA 98101.

[18 AAC 50.350(j), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 21 of 26

#### Section 10. Standard Conditions Not Otherwise Included in the Permit

33. For purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any standard in this permit, nothing in this permit precludes the use of any credible evidence of information relevant to whether the facility would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[18 AAC 50.350(f)(3), 1/18/97] [Federal Citation: 40 CFR §52.12(c), 7/1/99]

- **34.** The Permittee must comply with each permit term and condition. Noncompliance constitutes a violation of AS 46.14, 18 AAC 50, and the Clean Air Act, except for those requirements designated as not federally-enforceable, and is grounds for:
  - a. an enforcement action;
  - b. permit termination, revocation and reissuance, or modification in accordance with AS 46.14.280; or
  - c. denial of an operating-permit renewal application.

[18 AAC 50.345(a)(1) & 18 AAC 50.350(b)(3), 1/18/97]

**35.** It is not a defense in an enforcement action to claim that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with a permit term or condition.

[18 AAC 50.345(a)(2) & 18 AAC 50.350(b)(3), 1/18/97]

**36.** Each permit term and condition is independent of the permit as a whole and remains valid regardless of a challenge to any other part of this permit.

[18 AAC 50.345(a)(3) & 18 AAC 50.350(b)(3), 1/18/97]

- **37.** Compliance with permit terms and conditions is considered to be compliance with those requirements that are:
  - a. included and specifically identified in the permit; or
  - b. determined in writing in the permit to be inapplicable.

[18 AAC 50.345(a)(4) & 18 AAC 50.350(b)(3), 1/18/97]

**38.** The permit may be modified, reopened, revoked and reissued, or terminated for cause. A request by the Permittee for modification, revocation and reissuance, or termination; or a notification of planned changes or anticipated noncompliance does not stay any operating permit condition.

[18 AAC 50.345(a)(5) & 18 AAC 50.350(b)(3), 1/18/97]

**39.** The permit does not convey any property rights of any sort, nor any exclusive privilege.

[18 AAC 50.345(a)(6) & 18 AAC 50.350(b)(3), 1/18/97]

**40.** The Permittee shall allow an officer or employee of the Department or an inspector authorized by the Department, upon presentation of credentials and at reasonable times with the consent of the owner or operator, to:

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000 Expiration Date: April 5, 2005

Permit No. 194TVP01 Page 22 of 26

a. enter upon the premises where a source subject to the operating permit is located or where records required by the permit are kept;

- b. have access to and copy any records required by the permit;
- c. inspect any facilities, equipment, practices, or operations regulated by or referenced in the permit; and
- d. sample or monitor substances or parameters to assure compliance with the permit or other applicable requirements.

[18 AAC 50.345(a)(7) & 18 AAC 50.350(b)(3), 1/18/97]

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 23 of 26

#### Section 11. Visible Emission Evaluation Procedures

An observer qualified according to 40 CFR §60, RM 9, shall use the following procedures to determine the reduction of visibility through the exhaust effluent.

**Position.** The qualified observer shall stand at a distance sufficient to provide a clear view of the emissions with the sun oriented in the 140° sector to his back. Consistent with maintaining the above requirement, the observer shall, as much as possible, make his observations from a position such that his line of vision is approximately perpendicular to the plume direction and, when observing opacity of emissions from rectangular outlets (e.g., roof monitors, open baghouses, noncircular stacks), approximately perpendicular to the longer axis of the outlet. The observer's line of sight should not include more than one plume at a time when multiple stacks are involved, and in any case, the observer should make his observations with his line of sight perpendicular to the longer axis of such a set of multiple stacks (e.g., stub stacks on baghouses). The observer shall maintain a distance of at least 15 feet from the emission point.

**Field Records.** The observer shall record the name of the plant, emission location, facility type, observer's name and affiliation, and the date on the Visible Emissions Field Data Sheet. The time, estimated distance to the emission location, approximate wind direction, estimated wind speed, description of the sky condition (presence and color of clouds), and plume background are recorded on the sheet at the time opacity readings are initiated and completed.

**Observations.** Opacity observations shall be made at the point of greatest opacity in that portion of the plume where condensed water vapor is not present. The observer shall not look continuously at the plume, but instead shall observe the plume momentarily at 15-second intervals. Unless specified otherwise in this permit, obtain a minimum of 240 observations.

**Attached Steam Plumes.** When condensed water vapor is present within the plume as it emerges from the emission outlet, opacity observations shall be made beyond the point in the plume at which condensed water vapor is no longer visible. The observer shall record the approximate distance from the emission outlet to the point in the plume at which the observations are made.

**Detached Steam Plume.** When water vapor in the plume condenses and becomes visible at a distinct distance from the emission outlet, the opacity of emissions should be evaluated at the emission outlet prior to the condensation of water vapor and the formation of the steam plume.

**Recording Observations.** Opacity observations shall be recorded to the nearest 5 percent at 15-second intervals on the Visible Emissions Observation Record contained in this section. Record the minimum number of observations required by the permit. Each momentary observation recorded shall be deemed to represent the average opacity of emissions for a 15-second period.

**Data Reduction.** To determine compliance with a standard set out in condition 2 of this permit, count the number of observations that exceed 20 percent opacity and record this number on the sheet.

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 24 of 26

# Visible Emissions Field Data Sheet

Certified Observe	er:			
Company:				SOURCE LAYOUT SKETCH
Location:			<del> </del>	X Emission Point
Test No.:	Date	:		
	Source:			
Production Rate, Operation Characteristics Characteristics and Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are considered as a constant of the Characteristics and the Characteristics are constant of the Characteristics are constant of the Characteristics and the Characteristics are constant of	ing Rate, or arging Rate:			
Hrs. of o	observation:			Chaptrore Position
				Sun Location Line

Clock Time	Initial		Final
Observer location Distance to discharge			
Direction from discharge			
Height of observer point			
Background description			
Weather conditions Wind Direction			
Wind speed			
Ambient Temperature			
Relative humidity			
Sky conditions: (clear, overcast, % clouds, etc.)			
Plume description: Color			
Distance visible			
Water droplet plume? (attached or detached?)			
Other information			

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 25 of 26

ompany <sub>-</sub>			Ce	rtified O	bserver	î				Page _
est Numb	oer				Clo	ock time				
Date:			oility reduce Seconds (		15		Plume		Comments	
Hr	Min	0	15	30	45	Attached	Detached			
dditional	informa	tion:								
bserver S	Signature	;								
Pata Redu Duration of Tumber of	f Observ		riod (mii	nutes)						
lumber of			ceeding	20%						
verage C		Summar	y							
	Set		1	Tr:	me	1		Opa	Ostr.	

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

Permit No. 194TVP01 Page 26 of 26 Section 12. ADEC Notification Form Report by completing and faxing this form to: (907) 269-7508, or telephone: (907) 269-8888 Name of Permittee Facility Name 1. **Reason for Notification:** □ Excess Emission □ Permit Condition Deviation 2. **Event Information (Use 24-hour clock):** DATE **END** Time **START** Time **DURATION** (hr:min): Total : 3. Cause of Event (Check all that apply): □ START UP ■ UPSET CONDITION □ CONTROL EQUIPMENT ☐ SHUT DOWN ☐ SCHEDULED MAINTENANCE MONITOR MALFUNCTION □ OTHER Provide a detailed description of what happened. Attach additional sheets as necessary. 4. Sources Involved: Identify each Emission Source involved in the event, using the same identification number and name as in the Permit. List any Control Device or Monitoring System affected by the event. Attach additional sheets as necessary. Source ID No. **Source Name** Description **Control Device** 

#### 5. Emission Standard Exceeded:

Identify each Emission Standard and Permit Condition exceeded during the event. Describe in detail, the extent to which each Standard or Condition was exceeded. List ALL known or suspected injuries or health impacts. Attach additional sheets as necessary.

Standard or Condition	Limit	Exceedance

#### 6. Emission Reduction:

Describe in detail, ALL of the measures taken to minimize and/or control emissions during the event. Attach additional sheets as necessary.

#### 7. Corrective Actions:

Describe in detail, ALL of the corrective actions taken to restore the system to normal operation. Attach additional sheets as necessary.

Based on information and belief formed after reasonable inquiry, I certify that the statements and information in and attached to this document are true, accurate, and complete.

Printed Name	Signature	Date

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

# Alaska Department of Environmental Conservation Air Permits Program April 5, 2000

Airline Support, Inc., Incineration Facility

LEGAL AND FACTUAL BASIS

of the terms and conditions for

Permit No. 194TVP01

Final Draft

Prepared by: Dr. Seetharaman Ganapathy, Bill MacClarence, and Bill Walker

#### INTRODUCTION

This document describes the legal and factual basis for the terms and conditions of Operating Permit No. 194TVP01.

The **Airline Support, Inc., Incineration Facility** is an airline flight catering service that incinerates waste generated from food service aboard domestic and international flights. The facility is owned and operated by Airline **Support, Inc.** Airline **Support, Inc.** Airline **Support, Inc.**, is the Permittee for the facility's operating permit.

#### PROCESS DESCRIPTION

As provided in the application, the facility contains a solid waste incinerator with a maximum rated capacity of 1100 lbs/hr of Type 1 waste. The rating varies from 588 pounds per hour Type 4 waste, to 1100 pounds per hour Type 1 waste. There is no enforceable restriction on the type of waste that can be burned in this unit.

The incinerator is a Consumat Model C-225P (serial No. 4757), 13.2-ton-per-day incinerator with a Consumat ML-250D hydraulic power feeder with a 25 cubic foot capacity. The incinerator is a starved-air modular incinerator with four gas-fired ½ million Btu/hr burners in the primary chamber, and one 1.5 million Btu/hr burner in the secondary chamber. Air is supplied to the primary and secondary chambers by independently controlled blowers.

The primary chamber operates at low interior gas velocities under controlled temperature conditions. Heat released from burning waste is controlled by limiting the air added to less than what is required for complete combustion. Controlling the combustion rate in the primary chamber is essential for optimum emission control in this process. In the secondary chamber, gasses pass through a turbulent mixing zone where air is added to complete oxidation.

The incinerator operates three to four times per week for three to four hours. About 2000 pounds of catering waste is incinerated during each use.

The incinerator does not have add-on emission control equipment. Exhaust gasses are emitted through a 30" ID duct 22 feet above ground level.

#### **Table 1. - Source Inventory and Description**

Section 4 of Operating Permit No. 194TVP01 contains a table describing the source regulated by the permit. The table is provided for information and identification purposes only. Specifically, the source rating/size provided in the table is not intended to create an enforceable limit.

In addition to the incinerator listed in Table 1, the facility has two insignificant sources—a residential gas-fired water heater, and a gas-fired space heater.

#### **EMISSIONS**

#### **Emissions Summary Table**

Pollutant	Potential Emissions (tpy)	Assessable Emissions (tpy)
$NO_X$	7.6	0.4
СО	0.7	0.04
PM	8.3	0.5
$SO_2$	7.2	0.45
VOC	7.2	0.42
HC1	5.2	0.30

The emissions summary table shows that the facility is minor for each of the above air contaminants, and is below the billable amounts. Emission factors used for the table are from AP-42, tables 2.1-9 and 2.1-12 (10/96 revision). For particulate matter, the February 1999 source test showed a lower rate of 2.33 lb/ton waste, compared to 3.43 lb/ton from AP-42.

Potential emissions are based on 8,760 hours of operation per year at 1100 lb/hr of Type 3 waste. Assessable emissions are based on 1000 hours of operation at 500 lb/hr.

Emissions from insignificant sources are assumed to be negligible.

#### BASIS FOR REQUIRING AN OPERATING PERMIT

**Airline Support, Inc., Incineration Facility** requires an operating permit because it has an incinerator rated at more than 1000 pounds per hour of Type 1 waste. **Airline Support, Inc., Incineration Facility** meets the definition of operating permit facility in the State regulations at Section 2.

Alaska regulations require operating permit applications to include identification of "regulated sources." As applied to **Airline Support, Inc., Incineration Facility**, the State regulations require a description of each incinerator, including a demonstration showing each requirement in 18 AAC 50.050, Incinerator Emissions Standards, that applies [18 AAC 50.335(e)(4)(A)]. The Consumat incinerator is subject to 50.050 because it is an incinerator with a rated capacity greater than 1000 pounds per hour.

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

State regulations also require a description of:

Each source regulated by a standard in 18 AAC 50.055, Industrial Processes and Fuel Burning Equipment [18 AAC 50.335(e)(4)(C)] [an incinerator is not subject to this standard because it is not an industrial process or fuel burning equipment, as defined in 18 AAC 50.990];

Each source subject to a federal standard adopted by reference in 18 AAC 50.040 [18 AAC 50.335(e)(2)] [because the incinerator does not burn medical/infectious or hazardous waste, an incinerator this size is not subject to federal emission standards]; and

Sources subject to requirements in an existing DEC permit [18 AAC 50.335(e)(5)] (See Current Air Quality Permits below).

The emission source at **Airline Support, Inc., Incineration Facility** classified as a "regulated source" according to the above DEC regulations is listed in Table 1 of the permit.

#### **CURRENT AIR QUALITY PERMITS**

# **Previous Air Quality Permit to Operate**

The most recent permit issued for this facility is Permit to Operate Number 9021-AA011. This permit to operate was issued May 24, 1990, to Hacor, Inc. The incinerator did not operate from mid-1990 to early 1997. In 1997, the incinerator was sold to Airline Support, Inc., and received Department approval to operate under the permit issued to Hacor.

#### **Construction Permits**

No construction permits have been issued for this facility after 1/18/97.

#### **Permit Application History**

The owner or operator submitted an application on November 24, 1997.

The application was determined to be complete on January 21, 1998.

#### **COMPLIANCE HISTORY**

The facility is located in a commercial area within the Anchorage International Airport complex. Excess emission consisting of opacity violations or black smoke or odor problems do not go unnoticed and unreported due to several people who work in the immediate vicinity of the plant. In 1997, after the plant started under new ownership, failure of a blower motor supplying air to the primary chamber resulted in an excess emission incident involving smoke. A nuisance complaint was received from workers at an adjacent facility. The compliance staff investigated this incident. The operator appeared to have taken the right steps to bring the situation under control and stop the opacity violations.

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

The last inspection report notes that during the startup/preheat phase it is difficult to bring the incinerator to a temperature of 950 °F by firing the primary burner using natural gas only. This was confirmed by the facility operator. Charging of a high BTU waste such as cardboard during the startup/preheat phase helps bring the lower chamber temperature to 950 °F and makes the incinerator ready to receive the food catering waste. The charging of the cardboard during the startup/preheat phase appears to conflict with condition 4B of the existing permit 9021-AA011. The compliance staff expressed concerns about the ability of the stack emissions to meet the grain loading limit during the startup/preheat phase. After discussion with the facility operator, the permit writer concludes that charging of cardboard during the startup/preheat phase is essential to preheat the incinerator and to bring it up to the operating temperature of 950 °F. The facility operator reports that controlled operation of the incinerator during the startup/preheat process does not result in opacity exceedance for more than a minute or two. This would not be a violation of the opacity standard.

The facility has been successfully source tested for PM and carbon monoxide emissions in early 1999 and has met the opacity and grain loading limits. Source test runs were during burning of food catering waste after the preheat phase. The facility did not operate from mid-1990 to early 1997, so it was not source tested during this period.

In February 1999, a compliance inspector found that the facility had not submitted all facility operating reports. This occurred as a result of staff turnover. Upon notification, the new operator promptly submitted all overdue facility operating reports. The last inspection also noted the difficulty in complying with permit condition 4B of permit 9021-AA011, that required stoppage of incinerator loading whenever the primary chamber temperature fell below 1100 °F. The facility operator notified the inspector that charging of a high BTU waste such as cardboard is required during the startup/preheat process to bring the lower chamber to 950 °F before charging catering waste in the incinerator.

#### LEGAL AND FACTUAL BASIS FOR THE PERMIT CONDITIONS

#### **Condition 1 - Section 3**

**Legal Basis:** [18 AAC 50.400 – 420]

[18 AAC 50.350(c), 1/18/97]

The regulations require all permits to include due dates for the payment of fees and any method the permittee may use to re-compute assessable emissions.

**Factual Basis:** Permit Condition 1 includes only the requirement to pay permit administration fees, not emission fees. 18 AAC 50.410 only requires payment of fees for contaminants for which assessable emissions are 10 tons per year or more. This facility has the potential to emit less than 10 tons of any regulated air contaminant. Therefore, assessable emissions will never occur in billable amounts unless the facility is modified. Conditions requiring payment of, or annually re-computing assessable emissions, are not warranted.

Administrative Revision: November 27, 2000 Issue Date: April 5, 2000

#### **Condition 2**

**Legal Basis:** [18 AAC 50.050(a)(2), 1/18/97]

[18 AAC 50.350(d), 6/21/98]

The condition applies because the source is an incinerator that is not a municipal wastewater treatment plant sludge incinerator.

**Factual basis:** The condition re-iterates the applicable opacity standard. The Permittee may not cause or allow their equipment to violate this standard.

Monitoring consists of two steps. First, each operating day, within 10 minutes of charging food processing wastes, and once per month when cardboard is burned during preheat, observe the exhaust plume for the presence or absence of smoke. If no smoke is present, no further monitoring is needed. If smoke is present, then the operator must quantify the opacity using the state reference test method (Method 9). The permit requires 15 minutes of opacity readings to be done immediately upon observing smoke during the required smoke/no smoke observation. An additional 45 minutes of Method 9 observations are required based on the results of the 15 minutes of readings. This monitoring will cover the period of time most likely to have exceedances.

The intent of this provision is that the operator consistently maintain control over the incinerator throughout the time that food processing waste is being burned—the time when combustion is most likely to be incomplete is right after waste is charged.

Exceedances of the opacity standard may occur during the initial period when cardboard is fed into the incinerator to bring it up to temperature (preheat phase). As such, the Department is requiring a monthly check of emissions during the preheat phase. The operator has reported that opacity exceedance does not occur for more than a minute or two during the preheat phase. If not over three minutes, this would not be a violation of the opacity standard. There is likelihood of more toxic emissions if excess emissions occur when food catering wastes are burned. Therefore, the Department has chosen this time as the focus of required monitoring for both opacity and particulate matter.

The final permit was changed from the public notice draft to allow decreased frequency of opacity observations once a pattern of compliance is established. Since the incinerator is operated three to four times per week, once in 8 operating days would be about every two weeks.

#### **Condition 3**

**Legal Basis:** [18 AAC 50.050(b). 1/18/97]

[18 AAC 50.350(d), 6/21/98]

The condition applies because the source is an incinerator that is not a municipal wastewater treatment plant sludge incinerator, and that has a rated capacity between 1000 and 2000 pounds per hour.

Because the waste stream does not include medical, infectious wastes, or hazardous wastes, federal emission standards do not apply to an incinerator of this size.

**Factual basis:** The condition reiterates the applicable particulate matter standard. The Permittee may not cause or allow their equipment to violate this standard.

Particulate matter must be measured once every 5 years—once during the life of the permit, unless otherwise requested in writing by the Department. As with the opacity monitoring, at least one run of the Method 5 testing must be during and following initial charging of food catering wastes.

If any waste stream other than food catering waste or the cardboard used for preheating is burned in the incinerator, another Method 5 test would be required because a source test while burning food catering waste could not be presumed to represent emissions from another waste stream.

#### **Condition 4**

**Legal Basis:** [18 AAC 50.050(a)(2). 1/18/97]

[18 AAC 50.050(b), 1/18/97]

[18 AAC 50.350(d), 6/21/98]

**Factual basis:** This condition sets limits on the allowable operating temperature ranges for both the primary and secondary chambers. The requirements are changed from those in the May 1990 permit, based on more recent source testing that showed temperature ranges for which the incinerator complied with the opacity and particulate matter standards while burning the current waste stream. Charging food catering waste before the incinerator is up to temperature is prohibited. Combustion would be incomplete if the temperature is not high enough, and compliance has not been shown for this waste stream at lower temperatures. Cardboard may be burned at lower temperatures because it is necessary to get the incinerator hot enough to burn the catering wastes cleanly.

If future source testing shows compliance outside the currently allowed ranges, the Department may, in writing, amend the allowable ranges.

Except during burndown, if the temperature strays outside the allowable ranges after food catering wastes have been charged, the operator must take immediate corrective action to attempt to bring temperature back into range.

#### Conditions 5 - 7

**Legal Basis:** [18 AAC 50.055(a)(1). 1/18/97]

[18 AAC 50.055(b)(1), 1/18/97] [18 AAC 50.055(c), 1/18/97] [18 AAC 50.050(a)(2), 1/18/97]

[18 AAC 50.350(m), 1/18/97 – Insignificant sources]

**Factual basis:** These are general emission standards which apply to all industrial processes fuel-burning equipment, and incinerators, regardless of size. The conditions reiterate the general standards and require compliance for insignificant sources. The Permittee may not cause or allow their equipment to violate these standards. Insignificant sources are not listed in the permit unless specific monitoring, recordkeeping, and reporting are necessary to ensure compliance.

The Department finds that the insignificant sources at this facility do not need specific monitoring, recordkeeping, and reporting to ensure compliance.

#### **Condition 8**

**Legal Basis:** [18 AAC 50.350(m)]

**Factual Basis:** The regulations require a Permittee to certify that their insignificant sources comply with applicable requirements. The condition restates the regulatory requirement.

#### **Condition 9**

**Legal Basis:** [18 AAC 50.040(b)(3) & 18 AAC 50.350(d)(1), 1/18/97]

[Federal Citation: 40 CFR §61, Subpart M, 12/19/96]

If the Permittee engages in asbestos demolition and renovation, then these

requirements may apply.

**Factual Basis:** The condition cites and requires compliance with the regulations that will apply if the Permittee engages in asbestos demolition or renovation. Because these regulations include adequate monitoring and reporting requirements, and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient.

#### **Condition 10**

**Legal Basis:** [18 AAC 50.040(d) & 18 AAC 50.350(d)(1), 1/18/97]

[Federal Citation: 40 CFR §82, Subpart F, 7/1/97]

**Factual Basis:** The condition cites and requires compliance with the regulations that will apply if the Permittee uses certain refrigerants. Because these regulations include adequate monitoring and reporting requirements, and because the Permittee is not currently engaged in such activity, simply citing the regulatory requirements is sufficient.

#### **Condition 11**

**Legal Basis:** [18 AAC 50.030 & 18 AAC 50.350(f)(3), 1/18/97]

**Factual Basis:** This condition restates the good air pollution control practice requirement contained in the State Air Quality Control Plan. The requirement is contained on page IV.G.2-18 of the Plan. The requirement is not part of Alaska's federally-approved implementation plan and is not a requirement of the Clean Air Act.

#### **Condition 12**

**Legal Basis:** [18 AAC 50.045(a) & 18 AAC 50.350(f)(3), 1/18/97]

Applies to the Permittee because the Permittee must comply with emission

standards in 18 AAC 50.

**Factual Basis:** The requirement prohibits diluting emissions as a means of compliance. In practical terms, dilution only affects compliance when the emissions are being measured. Therefore, the monitoring is limited to immediately before source testing and once a year for exhaust that is continuously monitored.

Dilution can occur by design or by leaks in the exhaust ductwork. Intentional dilution is not expected to be a problem as it would increase operating costs by increasing induced draft fan power requirements. Careful review of source test plans and operating conditions will prevent intentional dilution. Therefore, only leaks need to be monitored under this condition.

The monitoring adequately prevents dilution by requiring leaks to be repaired before compliance with the emission standards are measured.

#### **Condition 13**

**Legal Basis:** [18 AAC 50.045(c) & 18 AAC 50.350(f)(3), 1/18/97]

Applies to the Permittee because they will operate a source in Alaska.

**Factual Basis:** This requirement prohibits violation of the air quality standards. Alaska's air quality control plan uses construction permit to ensure that new or increased pollution will not violate these standards. Therefore, as long as the Permittee obtains and complies with the required construction permits, the new or increased pollution will not violate the standards.

Monitoring simply requires the Permittee to obtain and comply with all required permits.

#### **Condition 14**

**Legal Basis:** [18 AAC 50.040(e), 18 AAC 50.045(d), & 18 AAC 50.350(d)(1), 1/18/97]

Applies to the Permittee because the Permittee will engage in industrial

activity at the facility.

**Factual Basis:** The condition restates the regulatory prohibition on fugitive dust. This prohibition calls for reasonable precautions to be taken to prevent particulate matter from being emitted into the ambient air while engaged in industrial activities.

The Permittee must keep records describing all precautions taken to prevent particulate matter from becoming airborne due to any of the activities described in this condition. If the precautions are not listed in the State Air Quality Control Plan, then the Permittee must also record a statement describing why the Permittee believes the precaution is reasonable. This monitoring ensures that the Permittee takes the reasonable precautions and has a reason for deciding if the precaution is reasonable.

The Permittee is to perform visual surveys of fugitive particulate matter emission sources at least once each month, and take corrective action if particulate matter is observed leaving the property. This is intended to identify whether the reasonable precautions taken are working, and to correct the problem if the precautions are not working.

#### **Condition 15**

**Legal Basis:** [18 AAC 50.055(g) and 18 AAC 50.310(m), 1/18/97]

Applies to the facility because the facility contains a stack or source

modified after November 1, 1982.

**Factual Basis:** The condition restates the prohibition on stack injection (i.e., disposing of material by injecting it into a stack). No specific monitoring for this condition is practical. Compliance is ensured by inspections, because the source or stack would need to be modified to accommodate stack injection.

#### **Condition 16**

**Legal Basis:** [18 AAC 50.110, 5/26/72]

[18 AAC 50.040(e), & 18 AAC 50.350(d)(1), 1/18/97]

Applies to the facility because the facility will have emissions.

**Factual Basis:** The condition restates the general prohibition on injurious air emissions, which applies to any emissions from the facility. While the other permit conditions and emissions limitation should ensure compliance with this condition, unforeseen emission impacts can violate this standard. These violations would go undetected except for complaints from affected persons. Therefore, to monitor compliance, the Permittee must monitor and respond to complaints.

Permittee is to report any complaints and injurious emissions. The plant does not handle any large quantities of hazardous air pollutants. The Permittee must keep records of the date, time, and nature of all complaints received, and summary of the investigation and corrective actions undertaken for these complaints, and to submit copies of these records upon request of the Department.

#### **Condition 17**

**Legal Basis:** [18 AAC 50.335(a), 1/18/97]

Applies if the Permittee intends to renew the permit.

**Factual Basis:** The condition restates the regulatory deadlines, citing the specific dates applicable to the facility. Submittal of the renewal application is sufficient monitoring, recordkeeping, and reporting.

#### **Condition 18**

**Legal Basis:** [18 AAC 50.345(a)(10), 1/18/97]

[18 AAC 50.220a), 1/18/97]

Standard condition to be included in all permits.

**Factual Basis:** Condition requires the Permittee to conduct source tests as requested by the Department, therefore, no monitoring is needed. Conducting the requested source test is its own monitoring.

#### Conditions 19 through 21

**Legal Basis:** [18 AAC 50.220(b) & (c), 1/18/97]

[18 AAC 50.350(g), 1/18/97]

Applies when the Permittee is required to conduct a source test.

**Factual Basis:** These conditions restate regulatory requirements for source testing. As such, they supplement the specific monitoring requirements stated elsewhere in this permit. The

tests reports required by later conditions adequately monitor compliance with these conditions, therefore, no specific monitoring, reporting, or recordkeeping is needed.

#### Conditions 22 - 24

**Legal Basis:** [18 AAC 50.345(a)(10), 1/18/97]

> [18 AAC 50.350(b)(3), 1/18/97] [18 AAC 50.350(g), 1/18/97]

Applies when the Permittee is required to conduct a source test.

Factual Basis: Standard condition 18 AAC 50.345(a)(10) is incorporated through these three conditions. Because this standard condition supplements specific monitoring requirements stated elsewhere in this permit, no monitoring, reporting, or recordkeeping is required. The source test itself is adequate to monitor compliance with this condition.

#### **Condition 25**

**Legal Basis:** [18 AAC 50.220(f), 1/18/97]

[18 AAC 50350(g), 1/18/97]

Applies when the Permittee tests for compliance with the particulate

matter standard.

**Factual Basis:** The condition incorporates a regulatory requirement for particulate matter source tests. The Permittee must use a certain equation to calculate the particulate-matter emission concentration from the source test results. Because this condition supplements specific monitoring requirements stated elsewhere in this permit, no monitoring, reporting, or record keeping is required.

#### **Condition 26**

**Legal Basis:** [18 AAC 50.205, 1/18/97]

[18 AAC 50.345(a)(9), 1/18/97]

[18 AAC 50.350(b)(3) & 18 AAC 50.350(i) 1/18/97]

Applies because the permit requires the Permittee to submit reports, and because the condition is a standard condition.

**Factual Basis:** This condition restates the regulatory requirement that all reports must be certified. To ease the certification burden, the condition allows the excess emission reports to be certified with the semi-annual operating report, although the excess emission reports must be submitted more frequently. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping, or reporting for this condition is needed.

#### **Condition 27**

Legal Basis: [18 AAC 50.350(i), 1/18/97]

> Applies because the Permittee is required to send reports to the Department.

**Factual Basis:** This condition merely specifies where submittals to the Department should be sent. Receipt of the submittal at the correct Department office is sufficient monitoring for this condition. This condition supplements the reporting requirements of the permit and no monitoring, recordkeeping, or reporting for this condition is needed.

#### **Condition 28**

Legal Basis: [18 AAC 50.200, 1/18/97]

[18 AAC 50.345(a)(8), 1/18/97]

[18 AAC 50.350(b)(3) & 18 AAC 50.350(g - i), 1/18/97]

Applies to all Permittees, and incorporates a standard condition

Factual Basis: Incorporates a standard condition in regulation, which tells the Permittee to submit information requested by the Department. Receipt of the requested information is adequate monitoring.

#### **Condition 29**

**Legal Basis:** [18 AAC 50.350(h), 1/18/97]

Applies to records required by a permit.

**Factual Basis:** The condition restates the regulatory requirements for recordkeeping, and supplements the recordkeeping defined for specific conditions in the permit. The records being kept provide adequate evidence of compliance with this requirement, therefore, no additional monitoring, recordkeeping, or reporting is required.

#### Condition 30

[18 AAC 50.235(a)(2), 18 AAC 50.240(c) & 18 AAC 50.350(i), 1/18/97] **Legal Basis:** 

Applies when the emissions or operations deviate from the requirements of the permit.

**Factual Basis:** This condition satisfies two regulatory requirements related to excess emissions—the technology-based emission standard regulation and the excess emission regulation. Although there are some differences between the regulations, the condition satisfies the requirements of each regulation.

The condition does not mandate the use of the Department's reporting form, but it does specify that the information listed on the form must be included in the report.

The reports themselves and the other monitoring records required under this permit provide an adequate monitoring of whether the Permittee has complied with the condition. Therefore, no additional monitoring, recordkeeping, or reporting is required.

#### **Condition 31**

**Legal Basis:** [18 AAC 50.350(d)(4), 1/18/97]

[18 AAC 50.350(i), 1/18/97]

Applies to all permits.

**Factual Basis:** The condition restates the requirements for reports listed in regulation. The condition supplements the specific reporting requirements elsewhere in the permit and does not need any monitoring, recordkeeping, or reporting. The reports themselves are adequate monitoring for compliance with this condition.

#### **Condition 32**

**Legal Basis:** [18 AAC 50.350(j), 1/18/97]

Applies to all permittees.

**Factual Basis:** This condition specifies the periodic compliance certification requirements, and specifies a due date for the annual compliance certification. Because this requirement is a report, no monitoring, recordkeeping, or reporting is needed.

#### **Condition 33**

**Legal Basis:** [18 AAC 50.350(f)(3), 1/18/97]

[Federal Citation: 40 CFR §52.12(c), 7/1/99]

Applies to all federally-approved permits.

**Factual Basis:** This condition clarifies that any credible evidence can be used to verify compliance with the permit—not just the monitoring required under the permit. This condition is necessary to ensure compliance with the Clean Air Act. No monitoring, recordkeeping, or reporting is necessary for this condition.

#### Conditions 34 - 40

**Legal Basis:** [18 AAC 50.345(a), 1/18/97]

Applies to all operating permits.

Factual Basis: These are standard conditions required for all operating permits.